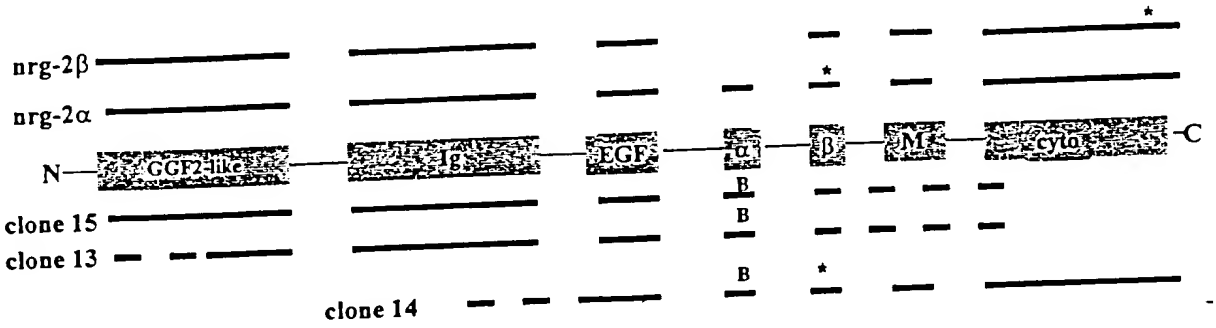

nrg-2β
nrg-2α
N
GGF2-like
Ig
EGF
α
β
M
cyto
C
clone 15
clone 13
clone 14
B
B
B
*
*
*

FIG. 1

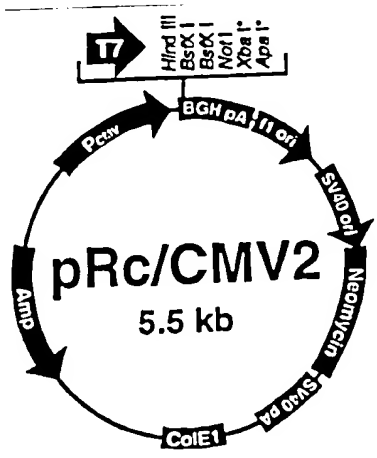

T7
Hind III
BstX I
BstX I
Not I
Xba I*
Apa I*
BGH pA
f1 ori
SV40 ori
Neomycin
SV40 pA
ColE1
Amp
Pcmv
pRc/CMV2
5.5 kb

FIG. 2

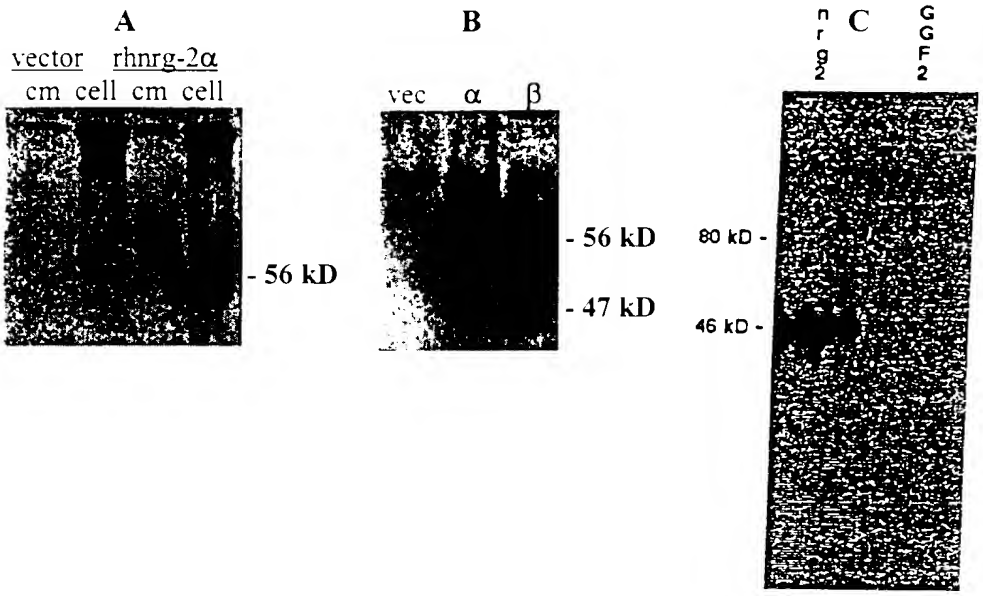

A
vector
rhnrg-2α
cm cell cm cell
- 56 kD
B
vec
α
β
- 56 kD
- 47 kD
C
nrg2
GGF2
80 kD -
46 kD -

FIG. 3

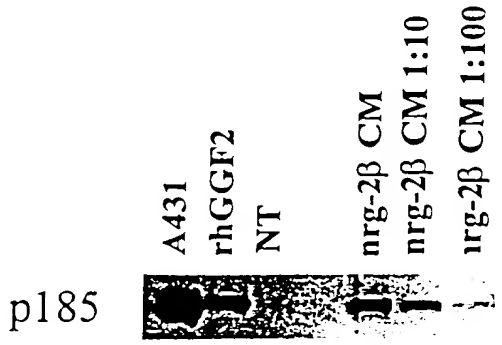

A431
rhGGF2
NT
nrg-2β CM
nrg-2β CM 1:10
nrg-2β CM 1:100
p185

FIG. 4A

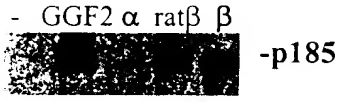

- GGF2 α ratβ β
-p185

FIG. 4B

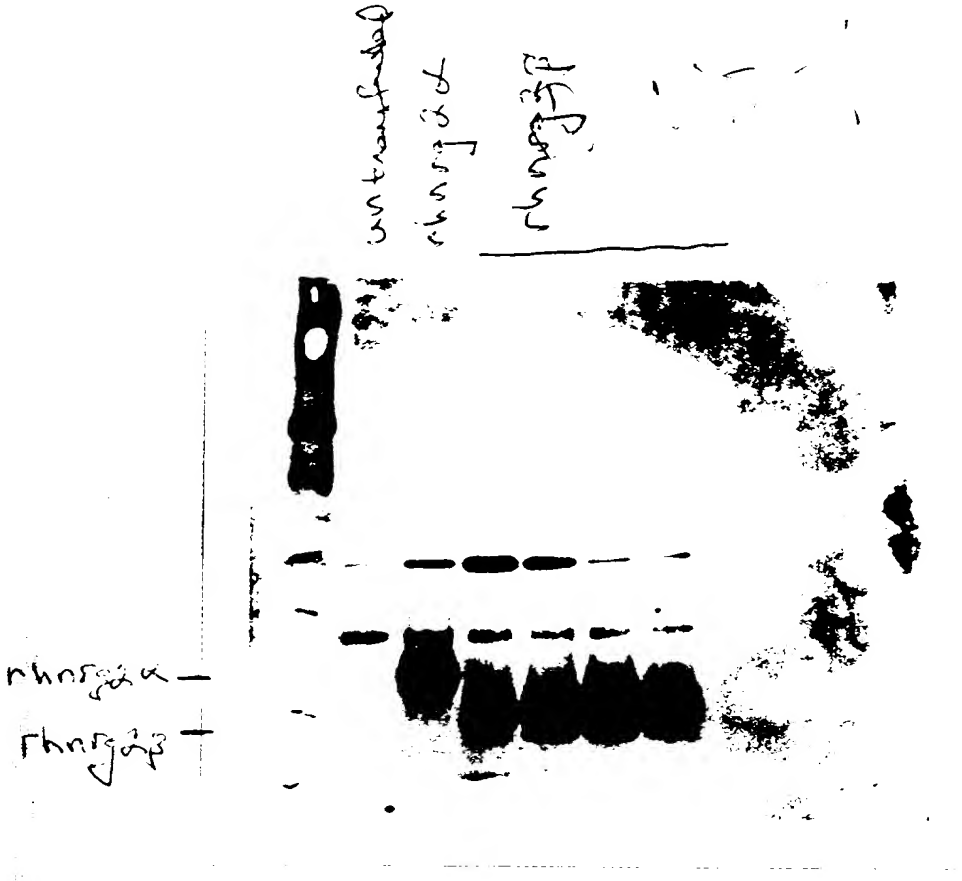


FIG. 5

ATGAGGCGCGACCCGGCCCCCGGCTTCTCCATGCTGCTCTTCGGTGTGTCGCTCGCC
TGCTACTCGCCCAGCCTCAAGTCAGTGCAGGACCAGGCGTACAAGGCACCCGTGGT
GGTGGAGGGCAAGGTACAGGGGCTGGTCCCAGCCGGCGGCTCCAGCTCCAACAGCA
CCCGAGAGCCGCCCGCCTCGGGTCGGGTGGCGTTGGTAAAGGTGCTGGACAAGTGG
CCGCTCCGGAGCGGGGGGCTGCAGCGCGAGCAGGTGATCAGCGTGGGCTCCTGTGT
GCCGCTCGAAAGGAACCAGCGCTACATCTTTTTCCTGGAGCCCACGGAACAGCCCTT
AGTCTTTAAGACGGCCTTTGCCCCCCTCGATACCAACGGCAAAAATCTCAAGAAAGA
GGTGGGCAAGATCCTGTGCACTGACTGCGCCACCCGGCCCAAGTTGAAGAAGATGA
AGAGCCAGACGGGACAGGTGGGTGAGAAGCAATCGCTGAAGTGTGAGGCAGCAGC
CGGTAATCCCCAGCCTTCCTACCGTTGGTTCAAGGATGGCAAGGAGCTCAACCGCAG
CCGAGACATTCGCATCAAATATGGCAACGGCAGAAAGAACTCACGACTACAGTTCA
ACAAGGTGAAGGTGGAGGACGCTGGGGAGTATGTCTGCGAGGCCGAGAACATCCTG
GGGAAGGACACCGTCCGGGGCCGGCTTTACGTCAACAGCGTGAGCACCACCCTGTC
ATCCTGGTCGGGGCACGCCCGGAAGTGCAACGAGACAGCCAAGTCCTATTGCGTCA
ATGGAGGCGTCTGCTACTACATCGAGGGCATCAACCAGCTCTCCTGCAAATGTCCAA
ATGGATTCTTCGGACAGAGATGTTTGGAGAAACTGCCTTTGCGATTGTACATGCCAG
ATCCTAAGCAAAGTGTCCTGTGGGATACACCGGGGACAGGTGTCAGCAGTTCGCAA
TGGTCAACTTCTCCAAGCACCTTGGATTTGAATTAAA (SEQ ID NO: 1)

FIG. 6

MRRDPAPGFSMLLFGVSLACYSPSLKSVQDQAYKAPVVVEGKVQGLVPAGGSSSNSTR
EPPASGRVALVKVLDKWPLRSGGLQREQVISVGSCVPLERNQRYIFFLEPTEQPLVFKTA
FAPLDTNGKNLKKEVGKILCTDCATRPKLKKMKSQTGQVGEKQSLKCEAAAGNPQPSY
RWFKDGKELNRSRDIRIKYGNGRKNSRLQFNKVKVEDAGEYVCEAENILGKDTVRGRL
YVNSVSTTLSSWSGHARKCNETAKSYCVNGGVCYYIEGINQLSCKCPNGFFGQRCLEKL
PLRLYMPDPKQSVLWDTPGTGVSSSQWSTSPSTLDLN (SEQ ID NO: 2)

FIG. 7

ATGAGGCGCGACCCGGCCCCCGGCTTCTCCATGCTGCTCTTCGGTGTGTCGCTCGCC
TGCTACTCGCCCAGCCTCAAGTCAGTGCAGGACCAGGCGTACAAGGCACCCGTGGT
GGTGGAGGGCAAGGTACAGGGGCTGGTCCCAGCCGGCGGCTCCAGCTCCAACAGCA
CCCGAGAGCCGCCCGCCTCGGGTCGGGTGGCGTTGGTAAAGGTGCTGGACAAGTGG
CCGCTCCGGAGCGGGGGGCTGCAGCGCGAGCAGGTGATCAGCGTGGGCTCCTGTGT
GCCGCTCGAAAGGAACCAGCGCTACATCTTTTTCCTGGAGCCCACGGAACAGCCCTT
AGTCTTTAAGACGGCCTTTGCCCCCCTCGATACCAACGGCAAAAATCTCAAGAAAG
AGGTGGGCAAGATCCTGTGCACTGACTGCGCCACCCGGCCCAAGTTGAAGAAGATG
AAGAGCCAGACGGGACAGGTGGGTGAGAAGCAATCGCTGAAGTGTGAGGCAGCAG
CCGGTAATCCCCAGCCTTCCTACCGTTGGTTCAAGGATGGCAAGGAGCTCAACCGCA
GCCGAGACATTCGCATCAAATATGGCAACGGCAGAAAGAACTCACGACTACAGTTC
AACAAGGTGAAGGTGGAGGACGCTGGGGAGTATGTCTGCGAGGCCGAGAACATCCT
GGGGAAGGACACCGTCCGGGGCCGGCTTTACGTCAACAGCGTGAGCACCACCCTGT
CATCCTGGTCGGGGCACGCCCGGAAGTGCAACGAGACAGCCAAGTCCTATTGCGTC
AATGGAGGCGTCTGCTACTACATCGAGGGCATCAACCAGCTCTCCTGCAAGTGTCCT
GTGGGATACACCGGGGACAGGTGTCAGCAGTTCGCAATGGTCAACTTCTCCTAA
(SEQ ID NO: 3)

FIG. 8

MRRDPAPGFSMLLFGVSLACYSPSLKSVQDQAYKAPVVVEGKVQGLVPAGGSSSNSTR
EPPASGRVALVKVLDKWPLRSGGLQREQVISVGSCVPLERNQRYIFFLEPTEQPLVFKTA
FAPLDTNGKNLKKEVGKILCTDCATRPKLKKMKSQTGQVGEKQSLKCEAAAGNPQPSY
RWFKDGKELNRSRDIRIKYGNGRKNSRLQFNKVKVEDAGEYVCEAENILGKDTVRGRL
YVNSVSTTLSSWSGHARKCNETAKSYCVNGGVCYYIEGINQLSCKCPVGYTGDRCQQF
AMVNFS (SEQ ID NO: 4)

FIG. 9

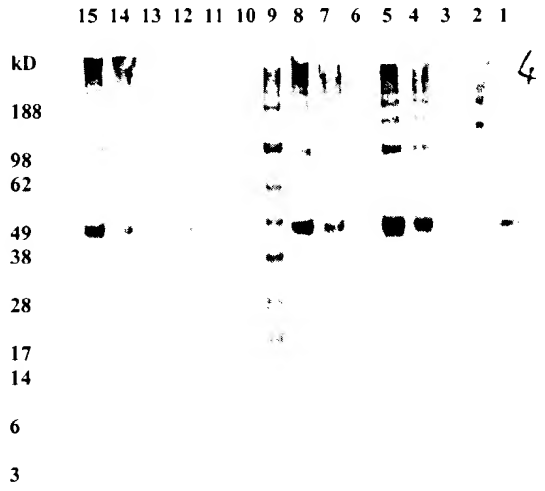
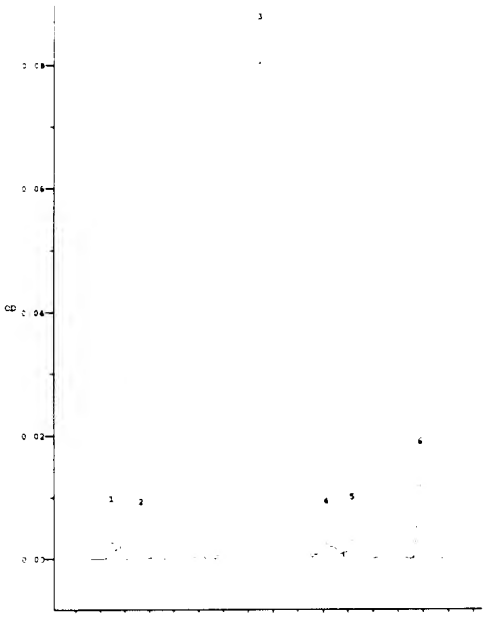


FIG. 10



NRG2B

From the Scan of this Lane the NRG2B is 92.5% Pure

Approximate Molecular Weight (kd)

250 50 10

FIG. 11

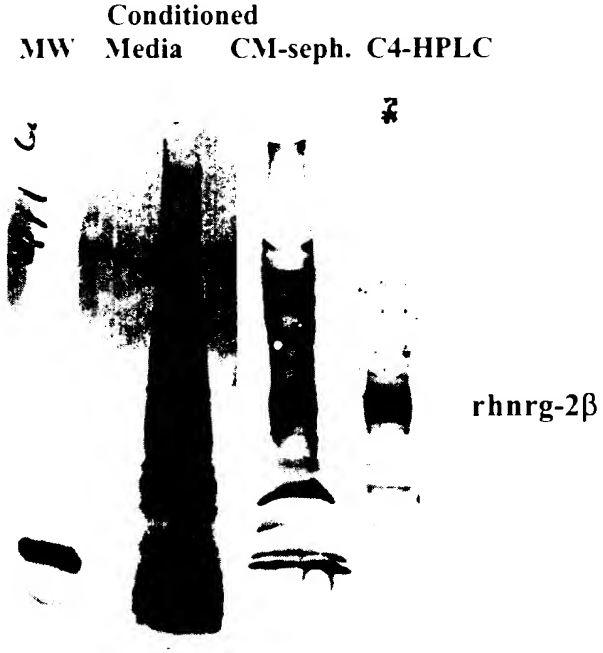


FIG. 12

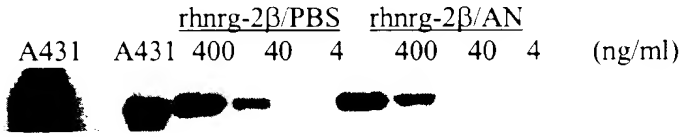


FIG. 13

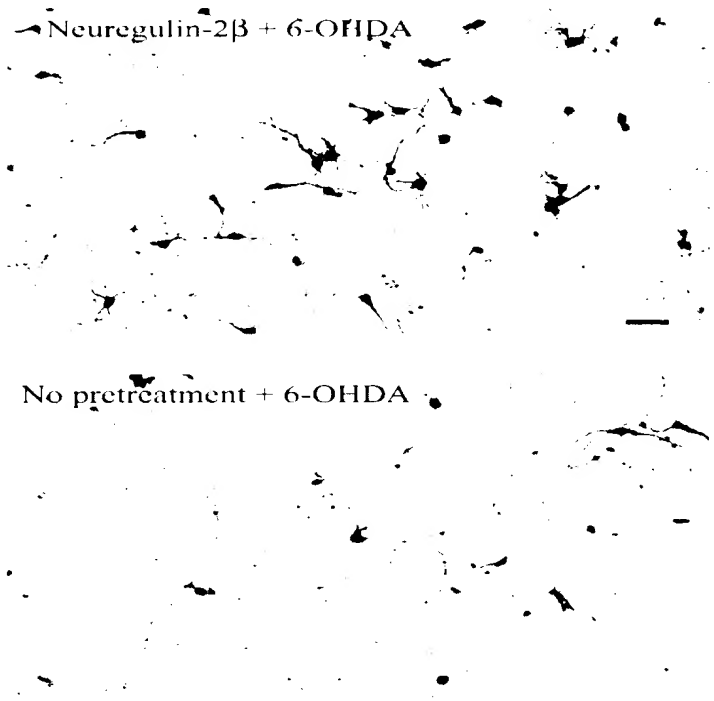


FIG. 14

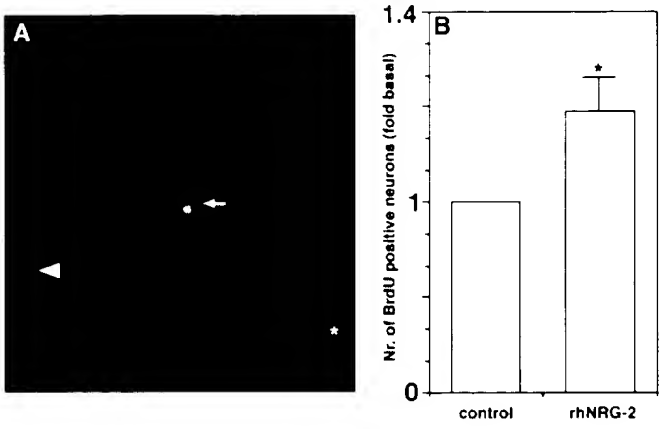

A
B
1.4
1
0
Nr. of BrdU positive neurons (fold basal)
control
rhNRG-2

FIG. 15

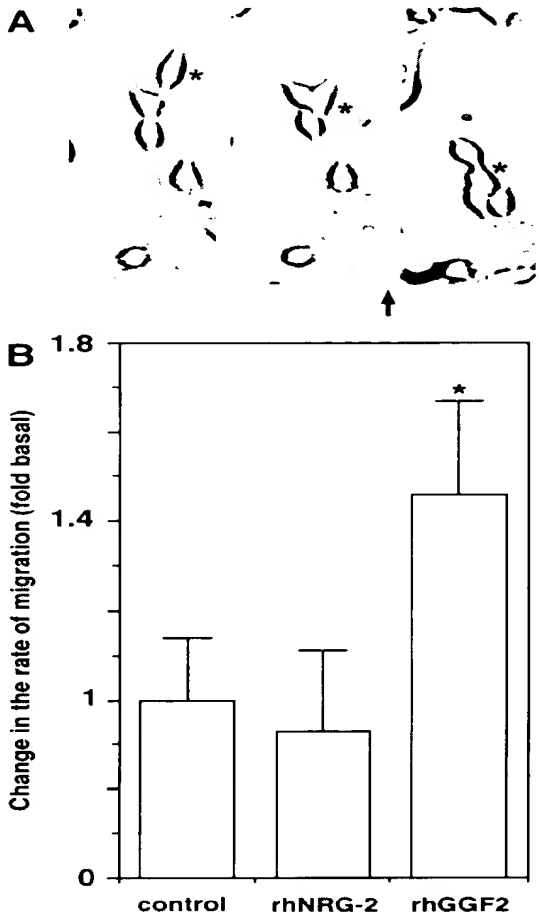

A
B
1.8
1.4
1
0
Change in the rate of migration (fold basal)
control
rhNRG-2
rhGGF2

FIG. 16

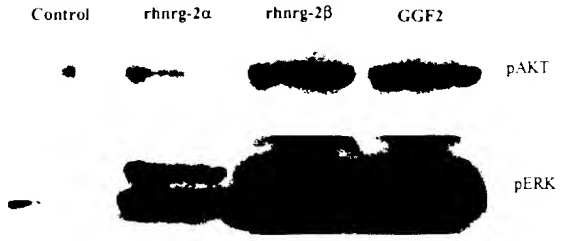

Control
rhnrg-2α
rhnrg-2β
GGF2
pAKT
pERK

FIG. 17

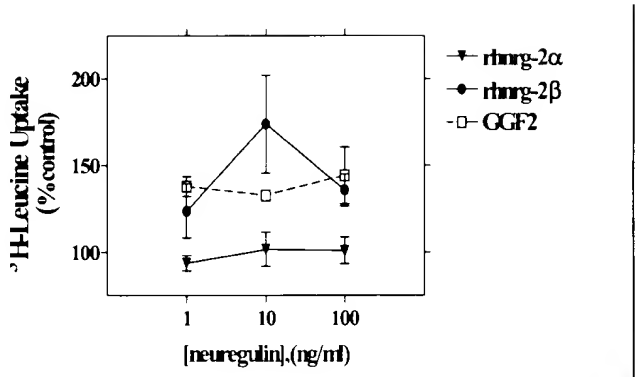

rhnrg-2α
rhnrg-2β
GGF2
200
150
100
1
10
100
[neuregulin],(ng/ml)

FIG. 18